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Report of the Pre-UNCTAD X Workshop on Exchange of Experiences among Enterprises in the Area of Electronic Commerce

held at the Palais des Nations, Geneva,
17-18 June 1999

Executive summary

This report is being provided as part of the substantive preparations for UNCTAD X. It is intended to enable the Preparatory Committee of the Whole for UNCTAD X to recommend ways in which the Conference could address the issue of electronic commerce and the participation of developing countries therein. The experts observed that, while e-commerce is growing rapidly and promises considerable potential benefits for developing countries and their small and medium-sized enterprises, most of these countries lack the necessary facilities and other conditions for participation in e-commerce. They identified a set of actions required to increase that participation.

These include increased access to Internet and telecommunications, reduction of costs associated with access to Internet, greater liberalization of the services of Internet service providers and providers of domain names, capacity-building and the promotion of greater trust and security. They also emphasized the role of Governments not only in promoting services and systems supportive of e-commerce and international harmonization of regulations, but also in participating directly in e-commerce-related activities.

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Introduction

1. The Workshop was held on 17 and 18 June 1999, at the Palais des Nations, Geneva. Resulting from a proposal initially made by the delegation of Japan, it was held pursuant to the agreed conclusions adopted at the closing plenary on 14 December 1998 of the third session of UNCTAD's Commission on Enterprise, Business Facilitation and Development, and pursuant to the consultations held by the President of the Trade and Development Board on 30 April 1999, which authorized the secretariat to organize four pre-Conference events for UNCTAD X. This workshop was the first of those events. The conclusions of the workshop will be submitted to the Preparatory Committee for UNCTAD X.

I. SUMMARY OF SUBSTANTIVE DISCUSSIONS

2. Experts representing a wide range of specialities within the field of electronic commerce attended the Workshop[1]. They met to exchange their experiences and their visions of the future of electronic commerce, and to discuss how to move from ideas to real-world practical solutions. They focussed on the problems of small and medium-sized enterprises (SMEs), especially those in the developing countries. The objectives of the Workshop were: (i) to assess and forecast the participation of enterprises (especially SMEs, and in particular those of developing countries) in electronic commerce; (ii) to exchange experiences among users of e-commerce, especially in developing countries; and (iii) to identify obstacles and new opportunities for greater participation by developing country enterprises in e-commerce.

3. In keeping with these main objectives, the Workshop divided its discussions into panels[2] to deal with the following sub-items: (a) measurement and benchmarking; (b) success stories and obstacles experienced by enterprises using e-commerce; (c) the issue of domain names; (d) experiences in, and possibilities for, lowering costs of e-commerce for enterprises; and (e) e-commerce solutions for SMEs -- the supply side.

4. The presentations and discussions of experiences allowed the Workshop to consider the two main angles from which the topic of e-commerce and development still needs to be studied: diagnosis of the present situation, and possible action for the future.

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[1] See attendance list in Annex III.

[2] See programme of work in Annex I.

A. Diagnosis

1. Measures and definitions

5. Recent data show that e-commerce is growing rapidly, but still unevenly. The experts underlined that e-commerce is the current driving force behind investment in Internet-related activities. It is becoming so important that it is likely to influence trends in infrastructure and its relative cost. E-commerce will become a major component of international trade in the years to come ($300 billion in 2002, and as much as 25 per cent of total world trade by 2005). The majority of "e-enterprises" are in advanced countries, especially the United States. However, a large proportion of such enterprises are still chiefly involved in "business-to-consumer" (B-to-C) transactions, which may not represent the future of e-commerce, since business-to-business (B-to-B) is quickly becoming the dominant component of e-commerce.

6. A major share of revenues from e-commerce are indirect (e.g. from advertising). The growth of e-commerce challenges many well-established economic and industrial models, and new players are emerging (*infomediaries*), a fact which requires appropriate strategies from SMEs.

2. Experiences

7. One of the merits of the Workshop was to offer evidence that electronic commerce is not an activity reserved for advanced or "well-connected" countries and enterprises, as shown by the experts' descriptions of their national experiences, including those of least developed countries (LDCs) such as Nepal and Benin.

8. The advantage which some "latecomers" may find in joining the e-commerce revolution when their telecommunications infrastructure is still incomplete was stressed: new equipment and technology offer much better performance/cost ratios, as shown by the higher proportion of digital (as opposed to analog) lines found in many developing countries (e.g. Chile). In this context, however, the importance of a supportive regulatory environment was identified as critical to success.

9. Several experts described experiences of how increased awareness of the potential of e-commerce had convinced Governments (Sri Lanka, Peru) to give priority to improving connectivity to rural areas. Innovative and successful experiences to lower the cost of Internet access were recounted.

10. Numerous experiences were identified in which efforts to promote local contents (products, languages) had been successfully implemented.

11. The experience of advanced countries having established e-commerce national task forces (France) and those proposing a "societal approach" to e-commerce (Japan) attracted much attention from developing country experts.

3. New definitions

12. E-commerce challenges some of the traditional definitions of such concepts as market, consumer, and producer: as its practice starts to spread, consumers become producers and vice-versa, and markets are being reshaped by information networks.

13. E-commerce is not just a mode of delivery reserved for a small range of sophisticated/superior products; through the optimization of production and delivery chains, its techniques are increasingly being used for undifferentiated goods and services, as demonstrated by certain developed countries (e.g. France). In the area of services, e-commerce can become a source of international competitiveness for developing countries, not just for traditional services (such as tourism and transportation) but also for more advanced and value-intensive services, such as publishing, design and translation.

14. The issue of e-commerce transactions (especially payments) being characterized by risk and insecurity has tended to be overemphasized from the buyers' point of view and under emphasized from that of vendors (particularly SMEs).

15. The international expansion of e-commerce need not be a game reserved for a limited number of "big players": through appropriate strategies and alliances, SMEs from all countries (including LDCs) can participate in it. The number and relevance of success stories are rapidly increasing, as described during many of the Workshop presentations.

16. The Internet is rapidly moving from the hands of technicians to those of entrepreneurs. Social usage will largely determine its value, in particular vis-à-vis trade and development. This evolution of the nature of the Internet is nowhere better reflected than in e-commerce: as many B-to-C enterprises (Amazon.com, for instance) are still awaiting their first profits, an increasing number of B-to-B companies (e.g. Cisco) are accelerating their shift to Internet-based transactions.

17. For enterprises in developing countries, this represents fresh opportunities to participate in global markets (e.g. in the context of global tendering for public procurement) and new dangers of marginalization, especially for those operating in underconnected areas, or those for which connection costs (to public telecommunications networks and to the Internet) are still excessively high.

B. Prognosis

18. Several areas for priority action were identified by the Workshop, along with the corresponding practical approaches.

1. Enabling access and lowering costs

19. Numerous experts stressed that critical mass was a key concept: the experience of countries like Ghana shows that when usage increases, prices fall. In this respect, national policies to promote e-commerce can initiate a "virtuous circle" and attract investors to the information infrastructure.

20. In many cases, practical solutions and tools exist which can partially meet developing countries' needs in the area of e-commerce; rather than "reinventing the wheel", less advanced countries and their enterprises should be able to benefit from up-to-date information on the "supply side", i.e. products proposed by various suppliers (such as software, including free software).

21. Various obstacles and problems regarding the participation of enterprises in e-commerce need to be addressed at the local level (tariffs, taxes, competition), while others require an international approach (cost of leased lines, users being charged for full-circuit). The exchange of practical experiences should be considered as one way of enhancing developing countries' efficiency in both contexts. Knowing more about other countries' experiences allows enterprises and Governments to identify low-cost solutions. The examples discussed at the Workshop (Peru's multicabins, PEOPLink's experience with low-cost equipment, the proposal by the Ecole Polytechnique Fédérale de Lausanne for "Terminodes") showed the merits of repeating this Workshop, including at the regional level. Similarly, greater shared knowledge should enhance developing countries' ability to participate actively in international debates on e-commerce (including in the World Trade Organization (WTO), World Intellectual Property Organization (WIPO), International Telecommunication Union and such other forums as the Internet Corporation for Assigned Names and Numbers (ICANN)).

2. Building local capacities, know-how and content

22. Experts identified the following priorities for stimulating local capacity-building regarding e-commerce and its use by enterprises in developing countries:

(a) Linking information flows (Internet-based in particular) to the supply chain (trade logistics) is essential in all countries still relying heavily on commodity and manufactured exports; in so doing, they will also ensure better synergies between their e-commerce strategies and their trade efficiency/trade facilitation efforts.

(b) The production of local content (languages) is essential, and the successful examples of this activity need to be documented and disseminated.

(c) The merits of e-commerce national policies, through which attempts are made to mobilize society as a whole, are now well established. Efforts should be pursued in this direction to create an e-commerce culture involving both Governments and business.

3. Building trust

23. The successes of some countries (such as Venezuela) in promoting instruments for secure e-commerce (certification and electronic documents such as digital invoices and signatures) were presented and generated interest in further exchanges of experiences, including on a regional basis. Such experiences had enhanced mutual respect between business and government.

24. Developing countries and their enterprises can contribute more actively to the process of adopting and promoting appropriate norms and standards for e-commerce, such as an XML version of electronic data interchange for administration, commerce and transport (EDIFACT).

25. The specific difficulties of SMEs from developing countries in "branding" were discussed and related to the presentations made by experts from WIPO, ICANN and the Société Internationale de Télécommunications Aéronautiques (SITA) on trade marks and Internet domain names. Experts advocated greater involvement by developing countries in discussions on the subject.

II. GENERAL OBSERVATIONS AND CONCLUSIONS

26. Experts concurred that the Workshop's objectives had been fully met, in that the debate on e-commerce and enterprises in developing countries had been successfully moved from the level of anecdotes to that of experiences. Unlike anecdotes, which can lend themselves to extrapolation, experiences provide both enough variety and enough comparability to allow a careful observer to draw lessons from measurable realities. Ultimately, such lessons can lead to the formulation of strategic objectives and to the implementation of appropriate action. Distinguishing dream from reality, and identifying those elements of today's realities which can apply to the development strategies of developing countries and their enterprises, were another successful objective.

27. Successful e-commerce strategies need to take full account of the multifaceted and multisectoral nature of e-commerce. Strategies focussing exclusively on one aspect of e-commerce (such as security, payments, multilateral trade negotiations or intellectual property aspects) will run the risk of losing sight of the ultimate goal of an e-commerce policy, which should be to improve the efficiency and competitiveness of the economy and enhance the standard of living and well-being of society as a whole.

28. In many respects, e-commerce has the potential to usher in a true knowledge-based economy to developing countries. In the process, access to information and knowledge can be enhanced and globalization can take on a more positive meaning in many parts of the world. The societal dimension of e-commerce can be reflected in the use of the concept of "e-velopment".

29. In an area in which technological change and innovation are continuously transforming the landscape, the exchange of experiences remains a valuable shortcut for smaller players. Experts expressed the wish that their deliberations and conclusions would be reflected at UNCTAD X and in its conclusions. They intended to pursue their collaboration, including through the regional workshops to be organized by UNCTAD in the coming months on e-commerce and development.

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Annex I

PROGRAMME OF WORK

Thursday, 17 June 1999

10.00 a.m. - Welcome Address - Jean Gurunlian, Director, UNCTAD Division of Services Infrastructure for Development and Trade Efficiency

10.30 a.m. - "Enterprises, E-commerce and Development"
Bruno Lanvin, Head, Electronic Commerce Section, UNCTAD/SITE

11.15 a.m. - Coffee break

11:30 a.m. - Panel 1: Which enterprises use e-commerce? Measurement and benchmarking issues

* Ben Petrazzini,	Strategic Planning Unit, International Telecommunication Union
* Bernard Stoven,	President, SIMPROFRANCE, France
* Prof. Jean-Pierre Hubaux,	EPFL and ICA, Switzerland

12.30 p.m. - General discussion

1.00 p.m. - Meeting adjourns for lunch

3:00 p.m. - Panel 2 : Enterprises using e-commerce: success stories and obstacles (Part 1)

* Prof. Nagaaki Ohyama,	Tokyo Institute of Technology, Chair of the Government's Study Groupon Electronic Commerce, Japan
* Javier Baquero,	President, Corporación Tecnicofinanciera, Ecuador
* Dr. Lalith Gamage,	Executive Director, TradeNet SL, Sri Lanka

4.00 p.m. - General discussion

4.30 p.m. - Coffee break

4.45 p.m. - Panel 3 : Power structures in cyberspace - The issue of domain names

* Chris Gibson,	Head, Electronic Commerce, WIPO
* Izumi Aizu,	Principal, Asia Network Research, Malaysia
* Rosa Delgado,	International Division, SITA, Switzerland

5.30 p.m. - General discussion

6.00 p.m. - Meeting adjourns

Friday, 18 June 1999

10.00 a.m. - Panel 4 : Enterprises using e-commerce: success stories and obstacles (Part 2)

* Philippe Monnier, Directeur-Général, Eureka, Switzerland
* Abdul-Wahab Bakary, Managing Director, COBUCO International, Benin
* James Kainyiah, Managing Director, Jam Kay Enterprise, Ghana
* Ted Johnson, Technical Coordinator, PEOPLink, United States

10.45 a.m. - General discussion

11.15 a.m. - Coffee break

11:30 a.m. - Panel 5 : Lowering the cost of e-commerce for enterprises: experiences and possibilities

* José Soriano, General Coordinator, Red Científica Peruana, Peru
* Nii Quaynor, CEO, Network Computer Systems, Ghana
* Shashank Kansal, Sr. Vice-President, WorldLink Communications, Nepal

12.15 p.m. - General discussion

1.00 p.m. - Meeting adjourns for lunch

3:00 p.m. - Panel 6 : The supply side/ e-commerce solutions for SMEs

* Judith Payne, Senior Principal, American Management Systems, United States
* José Ali Vivas, Director, Cavecom-e, Venezuela
* Sherif Hashem, Manager, Egypt Information Highway Project, Egypt

3.45 p.m. - General discussion

4.30 p.m. - Summary of the Workshop discussions and preliminary conclusions to be brought to the attention of the UNCTAD X Preparatory Committee

5.00 p.m. - Closing remarks by Mr. Rubens Ricupero, Secretary-General of UNCTAD

5.30 p.m. - Meeting adjourns

Annex II

STATEMENTS AND PRESENTATIONS[3]

A. Statements

The Director of the Division of Services Infrastructure for Development and Trade Efficiency said in his introductory remarks that electronic commerce used to be a dream for some and a nightmare for others, but today, it is neither: in less than a few years, e-commerce had moved from the world of hype and fantasy to that of an almost tangible reality. It was no longer a question of debating whether e-commerce would exist or not; it was here already and would grow even faster in the years to come.

However, it was worth asking who would benefit from e-commerce and whether it would be an instrument for equity and efficiency or would only strengthen existing differences among the rich and the poor. Those questions were not of a theoretical nature. To address them in an action-oriented fashion, it was necessary to look as closely and objectively as possible at who was actually trading electronically today and who would be able to do so in coming years.

The tradition of working with civil society, and in particular with the enterprise sector, was now well established in UNCTAD. The presence at the Workshop of a significant number of representatives of the business community was further evidence that enterprises and international organizations such as UNCTAD could find it mutually beneficial to exchange views and experiences and, during the preparatory process for UNCTAD X, that was a reassuring sign.

In his closing remarks, the **Secretary-General of UNCTAD** stressed the importance attached by UNCTAD to the topic of electronic commerce, especially in the context of preparations for UNCTAD X. Its techniques were affecting a large array of activities and sectors, not only in services but also in manufactures and even in commodity markets. In many of those activities, e-commerce was not only a better and more efficient way of doing business, but also a radically different way of producing value, reaching customers and markets, and establishing relations and synergies across borders. Most of those changes, however, were taking place at a much faster pace than that at which Governments could establish rules and regulations and guarantee mechanisms. Some maintained that they should not attempt to do so, while others insisted on the irreplaceable nature of the role played by the public sector.

In all parts of the world, enterprises and Governments were joining forces to better identify the potential and specificities of electronic commerce and how it could affect their economies. Discussions had started on the possibility of including electronic commerce in a new round of multilateral trade negotiations.

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[3] These presentations can be found on the UNCTAD website at www.unctad.org/en/special, or by contacting Mr. Bruno Lanvin, Head, Electronic Commerce Section in SITE Division of UNCTAD, E-mail: bruno.lanvin@unctad.org

At the present stage, it was still too early to say how far and how fast the WTO would be able to advance in bringing electronic commerce into the realm of trade disciplines. However, it was clear that the more developing countries knew about electronic commerce, the easier it would be to move to a balanced and mutually beneficial outcome in that area. The question was : how do we define knowledge in a domain where technology is changing almost daily, and where many well-established economic, industrial and regulatory models are being challenged ? The answer was that, in e-commerce, knowledge came from practice, not from textbooks; hence, UNCTAD's efforts to involve the practitioners of electronic commerce in its work and reflection as much as possible. The presence at the Workshop of many practitioners of e-commerce, both from government and from the enterprise sector, was a concrete illustration of that approach.

The presence also of many experts from the capitals was an important signal. It confirmed not only that there was indeed a high level of interest in member countries in the topic of electronic commerce, but also that the work produced by UNCTAD in that area since the United Nations trade efficiency symposium of October 1994 had acquired solid international status.

In preparation both for UNCTAD X and for the new millennium, the topic of electronic commerce had taken on a very symbolic dimension. First, it was an area in which technology had delivered: even if access was still uneven, telematics was available, as were the Internet and most of the basic tools to facilitate global electronic commerce; the success of the information revolution, however, still remained to be built, and it would not be built on technological successes, but on human achievements. Second, the rapid expansion of electronic commerce was the economic translation of the emergence of a knowledge society, one in which growth, development, employment and improved living conditions relied more and more on information, education and human resources.

The phenomenon of electronic commerce was emerging as a distillation of all the potential dangers and benefits of globalization. It was still too early to say whether it would broaden or narrow the gap between the haves and have-nots of information. However, it was clear that the ability of enterprises (and especially SMEs) from developing countries to use electronic commerce would be a key ingredient in a truly global knowledge society.

B. Presentations

- Bruno Lanvin,	"Sharing experience among unequal partners"
- Ben Petrazzini,	"Profile of e-commerce activities in emerging economies"
- Javier Baquero,	"Electronic commerce"
- Dr. Lalith Gamage,	"Cyber Trader: The E-Business Centre@EDB"
- Chris Gibson,	"Domain names and business enterprises"
- Izumi Aizu,	"Internet governance: is it really feasible to make this global entity work?"
- Rosa Delgado,	"Estructuras de poder en Internet y en el comercio electrónico: El sistema de dominios (DNS)"
- Ted Johnson,	"PEOPLink: Successes and obstacles of a non-profit organization marketing handmade crafts on behalf of grassroots artisans"
- Nii Quaynor,	"Development of the Internet in Ghana"
- Shashank Kansal,	"Lowering the cost of e-commerce: realities and opportunities"
- Judith Payne,	"What is available today to help SMEs in developing countries succeed with e-commerce"
- Abdul-WahabBakary,	"Experiences of Co.Bu.Co International in the field of electronic commerce"
- James Kainyiah,	"Enterprises using e-commerce: success stories and obstacles"

Annex III

ATTENDANCE

1. Thirty-seven experts from the following States members of UNCTAD attended the Workshop:

Bangladesh
Benin
Brazil
China
Côte d'Ivoire
Cuba
Czech Republic
Ecuador
Egypt
France
Indonesia
Japan
Libyan Arab Jamahiriya
Peru
Philippines
Russian Federation
Saudi Arabia
Sri Lanka
Switzerland
Tunisia
Turkey
United Kingdom
United States of America
Venezuela
Viet Nam

2. Eleven representatives of agencies and organizations of the United Nations system and of intergovernmental organizations were present at the Workshop sessions.

3. Twenty-three other experts participated.

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